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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,890

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Steffen Peters

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EXAMINER

NATALINI, JEFF WILLIAM

ART UNIT

PAPER NUMBER

2858

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/810,890

Applicant(s)

PETERS ET AL.

Examiner

Jeff Natalini

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/19/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Brandle et al. (5421190).

In regard to claim 1, Brandle et al. discloses a measuring device for monitoring a material and determining a parameter that is related to the dielectric properties of the material (measures the density of the gas-abstract lines 1-3), comprising a product area for receiving the product (product is received in resonator (fig 1 (11))), a first microwave resonator (fig 1 (11)) from which, in operation, microwaves can enter the product area (product is inside the resonator), and a compensation device (fig 1 (12)) for compensating for environmental influences (col 1 line 57 – col 2 line 14), the compensation device comprising a second microwave resonator which is shielded from the product area in respect of microwave radiation (resonator (12) is a cavity resonator as seen in figure 1, and is shielded so the that none of the product to be measured can

enter- col 1 line 10-15).

In regard to claim 2, Brandle et al. further discloses wherein the compensation device is arranged to compensate for temperature variation (col 4 line 58 – col 5 line 3).

In regard to claim 3, Brandle et al. further discloses wherein the density of the product is determined (abstract, line 1-3).

In regard to claim 5, Brandle et al. further discloses wherein the first resonator and the second resonator are of substantially the same construction (seen in figure 1 and 2 (11 and 12); also col 4 line 66-68).

In regard to claim 6, Brandle et al. further discloses wherein the first resonator and the second resonator are at least partly filled with a dielectric (the first resonator is filled with the gas/product to be measured (abstract), and the second resonator (is sealed from the gas (abstract), so it would at least contain air which is a dielectric).

In regard to claim 7, Brandle et al. further discloses wherein the first resonator (fig 1 (11)) and the second resonator (fig 1 (12)) are arranged adjacent to each other, and separated by a space (there is a space seen in figure 1, between the two resonators).

In regard to claim 8, Brandle et al. further discloses wherein the first and second resonators form a modular unit (fig 3, contains both resonators (11 and 12) in a modular unit).

In regard to claim 9, Brandle et al. further discloses wherein during operation the product runs through the first resonator (col 4 line 16-25).

In regard to claim 10, the first resonator is a substantially shielded cavity resonator with an opening for the admission of the product (fig 1 (11) is seen to be cavity resonator and has an opening for the product (col 4 line 16-25).

3. Claims 11-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrmann et al. (6837122).

In regard to claims 11 and 18, Herrmann et al. discloses fibrous material processing machine having at least one fibre processing element (fig 2 (13) or fig 1 (5) col 4 line 11-14; fibers are processed in a funnel or card respectively) and controls the density of the fiber material (col 2 line 30-32) and further comprising a measuring device for monitoring a material (col 1 line 7-12), the measurement device having a first microwave resonator (abstract (number 15) in all figures) and a compensating device for compensating for environmental influences on said first microwave resonator (fig 1 (18); col 4 line 50-59), said compensating device comprising a second microwave resonator (fig 1 (18); moisture is effected by environmental influence since it could increase/decrease based on the present humidity or other factors), said measuring device being positioned at a measuring location (measuring locations are the placement of resonator (15) in figs 1 and 2) and a said processing element of said machine being adjustable in dependence on measurement values obtained at said measurement location (the speed of the rollers taking the fibers to be processed is adjusted based on the measurement; col 4 line 27-30).

In regard to claim 12, Herrmann et al. discloses where the machine processes textile fiber material (col 2 line 40-45) and wherein the device is arranged to measure the density of the fiber sliver and is able to influence the properties of the sliver (col 2 line 30-32).

In regard to claim 13, Herrmann et al. discloses where the machine is a carding machine, and the measurement device is arranged near a delivery output of the carding machine (col 3 line 27-30).

In regard to claim 14, Herrmann et al. discloses where the machine is a draw frame, and said measurement device being arranged near a delivery outlet of the draw frame (col 3 line 31-39).

In regard to claim 15, Herrmann et al. discloses where the machine is a draw frame, said draw frame comprising a first said measuring device in an inlet region and a second said measuring device in an outlet region (col 3 line 31-39).

In regard to 16, Herrmann et al. discloses a machine control and regulation device (fig 2 (16); col 4 line 27-30) to which each measurement device is connected (seen in figure 2).

In regard to claim 17, Herrmann et al. discloses an actuation device (fig 2 rollers 9, 10, and 11) for a processing element (fig 2 (13)), the actuation device being controllable by the control and regulation device in dependence on measurement data received by the first measurement device (col 4 line 27-30).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandle et al. in view of Herrmann et al. (6837122).

Brandle et al. lacks specifically wherein the product area is a channel for receiving a traveling strand of fibrous material.

Herrmann et al. discloses a device for measuring the mass of fibre strands using a microwave resonator, which the fibre will be sent through a resonator for determining the mass of the fibre.

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Brandle et al. to use the teaching of Herrmann et al. that discloses measuring fibre strands in a similar way to how Brandle et al. determines properties of gas to measure properties of fibre strands in order to control the homogenization of fibrous material (col 2 line 30-45).

***Response to Arguments***

5. Applicant's arguments filed 8/8/05 have been fully considered. The argument with respect to the limitation "microwave resonator which is shielded from the product area in respect of microwave radiation, is considered a valid argument to independent

claim 1, as this is the only claim this limitation appears in. Therefore independent claim 1 and depend claims 2-10 have been addressed in a new rejection.

Examiner traverses the argument that nothing in Herrmann suggests that resonator 18 compensates for environmental influences. In Herrmann et al. microwave resonator 18, measures moisture, and then this measurement is used to make a "moisture compensated measurement of the sliver mass" (col 4 line 56-57), so this is broadly considered a compensation device (as claims must be given broadest reasonable interpretation for examination) that is able to compensate for environmental influences as moisture is definitely environmentally influenced and a measurement (mass) is compensated for from this influence (moisture in the environment).

All references in the disclosure statement filed December 3, 2004 have been considered.

### ***Conclusion***

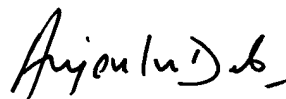
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



**ANJAN DEB**  
**PRIMARY EXAMINER**